

ILLINOIS COMMERCE COMMISSION

CASE NO.

DIRECT TESTIMONY

OF

DR. CHANTALE LACASSE

SUBMITTED ON BEHALF OF

**CENTRAL ILLINOIS LIGHT COMPANY
CENTRAL ILLINOIS PUBLIC SERVICE COMPANY
ILLINOIS POWER COMPANY**

February 28, 2005

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Chantale LaCasse. My business address is 1166 Avenue of the Americas,
4 New York, NY, 10036.

5 **Q. What is your current position?**

6 A. I am a Vice President with National Economic Research Associates, Inc. ("NERA").

7 **Q. Please summarize the professional qualifications that have led you to take a position**
8 **at NERA.**

9 A. I hold a B. Soc. Sc. with Honors in Economics (1983) and a B.A. with Honors in
10 Mathematics (1984) from the University of Ottawa (Canada). I hold an M.A. (1986) and
11 a Ph.D. in Economics (1991) from the University of Western Ontario (Canada). During
12 my doctorate, I specialized in Industrial Organization, Public Finance and Game Theory.
13 Game Theory is the technical basis for the theory of auctions. I worked under the
14 supervision of two of the most well-known auction theorists at the time, R. Preston
15 McAfee and John McMillan. R. Preston McAfee is now J. Stanley Johnson Professor of
16 Business, Economics and Management at the California Institute for Technology
17 (Pasadena, CA). John McMillan is now Jonathan B. Lovelace Professor of Economics at
18 Stanford University (Palo Alto, CA).

19 For my doctoral dissertation, I developed novel game-theoretical models to
20 analyze whether market players can collude in the presence of uncertainty in their
21 economic environment. One of the models that I developed applied this general theme
22 specifically to market players participating in auctions. This work of my doctoral

23 dissertation formed the basis for one of my professional papers, which was published in
24 one of the leading economic journals, the *RAND Journal of Economics*.

25 Brock University (St. Catharines, Canada) hired me to a full-time academic
26 position before I had completed my Ph.D. I subsequently held various full-time academic
27 positions at the University of Ottawa (Ottawa, Canada) and the University of Alberta
28 (Edmonton, Canada), as well as visiting positions at the University of Toronto (Canada)
29 and the Universitat Autònoma de Barcelona (Spain). I received tenure in 1996 and I was
30 promoted to the rank of Associate Professor in 1998. I was the primary (at times the only)
31 specialist in Game Theory in the Department where I taught and conducted research.
32 Every year I taught Game Theory and Microeconomic Theory to both undergraduate and
33 doctoral students, and I supported colleagues who did research that incorporated game-
34 theoretical concepts. I conducted original research in both economic theory and economic
35 policy. My research was grounded in game theory and it included work in auctions. I
36 published more than a dozen articles in refereed academic journals, included in the
37 *American Economic Review*, the *RAND Journal of Economics*, *Games and Economic*
38 *Behavior*, and *The Energy Journal*. I presented results of my research at workshops and
39 conferences, nationally and internationally, including meetings of the *International*
40 *Association for Energy Economics*, and meetings of the *Econometric Society*. I received
41 the John Vanderkamp Prize for the best article in *Canadian Public Policy/Analyse de*
42 *politiques* in the year 2000 for an article co-written with two of my colleagues at the
43 University of Ottawa.

44 On the basis of my expertise in the theory of auctions and in the implementation
45 of auctions, in 1997 I was offered the honor of holding the T.D. MacDonald Chair in

46 Industrial Economics at the Canadian Competition Bureau. The Canadian Competition
47 Bureau is the equivalent of the antitrust division at the Department of Justice. The T.D.
48 MacDonald is a one-year visiting position that is offered to one outstanding Canadian
49 academic each year. The Competition Bureau at that time needed expert advice before
50 implementing Canada's first auction for spectrum licenses. (A spectrum license grants to
51 its holder the right to use certain frequencies of the electromagnetic spectrum to provide a
52 communication service, such as cell phone service.) The Canadian government was
53 considering whether to follow the lead of the United States' Federal Communications
54 Commission. In 1994, the FCC had started auctioning off spectrum licenses and, on the
55 advice of auction theorists such as Preston McAfee and John McMillan, the FCC had
56 used a novel auction format, called the Simultaneous Multiple Round ("SMR") Auction.
57 The Canadian government wanted advice on using a similar design and wanted advice
58 regarding enhancing any aspects of the design that could discourage collusion. As holder
59 of the T.D. MacDonald Chair, I provided advice regarding the design of Canada's
60 upcoming spectrum auction. I also provided advice on various antitrust matters, including
61 a competitive assessment for a merger and advice in a price-fixing case.

62 Starting in 1998, I provided consulting advice on auctions and on antitrust matters
63 on a free-lance basis. I provided additional advice to the Canadian government
64 concerning the design of the first spectrum auction. I also provided advice on antitrust
65 matters, including the draft of Canadian Intellectual Property Enforcement Guidelines. I
66 also provided bidding advice to EPCOR Utilities Inc. ("EPCOR"). In the summer of
67 2000, EPCOR was bidding to buy Power Purchase Agreements in a simultaneous
68 multiple round auction similar to the auction format that had been used for the sale of

69 spectrum licenses. I provided advice to develop a bidding strategy and then provided
70 round-by-round bidding support.

71 On the basis of my expertise in the theory and implementation of auctions, I was
72 hired by NERA in 2001 to provide advice mainly to energy clients.

73 **Q. Please summarize your consulting experience since you joined NERA.**

74 A. My consulting experience at NERA has consisted of providing conceptual advice on
75 auction design, of providing detailed practical advice regarding the implementation of
76 auctions, and of managing solicitation processes. I have provided advice on all aspects of
77 auction design, including the type of auction format, the information to be revealed to
78 bidders, and the way in which winning bid prices are determined. I have written detailed
79 rules for auctions and other solicitation processes, based on my expertise in the theory of
80 auctions and on the objectives that the auction or solicitation was meant to achieve. I
81 have provided advice on the implementation of auctions and the management of
82 solicitation processes with a view to maximizing the success of such auctions, including
83 putting in place and designing bidding procedures, preparing training materials for
84 bidders, and using bidder comments to finalize solicitation documents. I have managed
85 various solicitation processes, performing bidder qualification, and managing the bid
86 submission and evaluation process.

87 More specifically, my main engagements at NERA have been as follows.

88 For each of the past four years, I have been Auction Manager for the Basic
89 Generation Service auctions in New Jersey on behalf of the four New Jersey Electric
90 Distribution Companies, Atlantic City Electric d/b/a Conectiv Power Delivery, Jersey
91 Central Power & Light, Public Service Electric & Gas, and Rockland Electric. These

92 auctions have involved the purchase of \$5 billion of electric supply for all default
93 customers of the state of New Jersey. I was part of the team that originally designed all
94 elements of the auction process, including the choice of a clock auction as the auction
95 format and the detailed rules for the auction, the association and confidential information
96 rules to ensure the independence of bidders, the design of a standard contract, the
97 selection of product as vertical tranches of full-requirements service, the rate design to
98 translate auction prices into retail rates, as well as the qualification procedures and the
99 application forms. Every year since the inception of this auction process in 2001, I have
100 provided regulatory support to the Electric Distribution Companies ("EDCs"), helping to
101 prepare filings for the New Jersey Board of Public Utilities ("BPU"), responding to
102 discovery, evaluating proposals from other parties for changes and improvements to the
103 process, preparing comments, and presenting testimony on the benefits of the auction
104 process.

105 In each of these years, I have managed the New Jersey statewide auction process
106 on behalf of the EDCs and the BPU. I have responded to bidder questions; maintained a
107 web site to provide information to bidders including final solicitation documents, rate
108 design tools and data necessary to prepare bids; prepared and led training sessions for
109 bidders; prepared protocols for the review by the BPU's Auction Advisor that describe
110 how the auction process is run; led the process to qualify bidders; trained personnel and
111 established all systems and infrastructure necessary to run the auction; administered the
112 bidding procedures by which bids are received and processed in accordance with
113 protocols approved by the BPU; and, finally, provided briefings and reports to the BPU
114 concerning the central aspects and results of the auction process.

After each auction, I have advised the EDCs concerning potential improvements to the auction process. I have participated in discussion with BPU Staff and the EDCs regarding these potential improvements. I assisted in developing a filing for the following year that incorporated changes for the next auction.

In 2004, I was retained to serve as Independent Auction Manager for the FirstEnergy Companies' Competitive Bid Process ("CBP") in Ohio. The Public Utility Commission of Ohio ("PUCO") had ordered the FirstEnergy Companies ("FirstEnergy") to hold a clock auction, similar to the format used in New Jersey, as a market test for the Rate Stabilization Plan filed by FirstEnergy. The PUCO had the choice between, on the one hand, accepting the results of an auction to procure full-requirements service for FirstEnergy's Standard Service Offer Load (about 10,000 MW) for the period beginning January 1, 2006 to December 31, 2008 and, on the other hand, rejecting the auction results in which case FirstEnergy's Rate Stabilization Plan Pricing would go into effect. I provided advice regarding the necessary modifications to the auction format, wrote the detailed auction rules, provided advice on credit and contract issues, and designed a bidding procedure tailored to the timeline and the size of the auction. I responded to bidder questions; provided advice on the structure of a web site designed to provide information to bidders including final solicitation documents, rate design tools and data necessary to prepare bids; prepared and led a bidder information session; prepared protocols for the review by the PUCO's Auction Advisor; led the process to qualify bidders; trained personnel and established a bidding procedure adapted to the requirements of the Ohio auction; and provided a complete factual report to the PUCO at the end of the auction.

138 In 2003, I provided advice to the Commission of Energy Regulation in Ireland in
139 their solicitation for new generation capacity. The objective was to bring at least 300 MW
140 of new capacity into operation to meet, at the earliest date achievable, a capacity need
141 anticipated for 2005. The successful bidder(s) would win the right to enter into an
142 agreement for up to ten years that provided revenue support for their generating facility.
143 I provided advice in designing a solicitation with the objective of selecting the most
144 advantageous group of generating facilities, taking into account their anticipated
145 commercial operation dates, the amount of capacity brought to market, their location, and
146 the overall revenue requirement of each plant. The solicitation was a Request for
147 Proposal ("RFP"). I provided advice on the financial qualifications that bidders had to
148 meet, on the measures that were necessary to foster competition, and on the evaluation of
149 the bids. I provided advice on drafts and on the final version of the solicitation
150 documents. I was part of the evaluation team, playing a major role in the financial
151 evaluation of bidders. Since 2004, I have also been providing similar advice to the
152 Ontario government (Canada) in their on-going solicitations for new conventional and
153 renewable capacity.

154 In 2003, Jersey Central Power & Light proposed to the BPU a pilot program by
155 which its residential customers could obtain green energy at the Basic Generation Service
156 price. I managed the RFP that was conducted for the procurement of this green energy. I
157 presented JCP&L's proposal at various regulatory meetings. I worked with interveners to
158 examine various alternative proposals for the procurement of Green BGS and to choose
159 the proposal that was most likely to lead to a successful pilot program. I worked with
160 JCP&L and their attorneys to finalize the BGS-Green contract that the winning supplier

or suppliers would sign, on issuing the final solicitation documents, and on answering bidder questions. I managed the bid evaluation process, including the qualification of bidders and the comparison of the bids. I prepared a full factual report for the BPU presenting the results of the solicitation.

NERA has been retained on other occasions where I have been called to provide advice on auction design and implementation, most notably by the Northeast ISOs (PJM, the New England ISO, and the New York ISO) to provide advice on their capacity market; by the Infocomm Development Agency of Singapore to provide design advice for their 2G and 3G spectrum auctions; and by the Balancing Pool of Alberta (Canada) to provide advice on the sale of Power Purchase Agreements that had gone unsold in the 2000 auction. I have provided expert testimony on the use of sealed bid auctions (*i.e.*, RFPs) for the sale of generation assets, and on the benefits of clock auctions for the procurement of supply for BGS customers.

Q. What is the purpose of your testimony?

A. As set forth in testimony sponsored by Ameren witnesses Mr. Craig Nelson, Ameren is petitioning the Illinois Commerce Commission ("ICC") to approve an auction process for the purpose of procuring supply for the load of its BGS customers. Ameren's decision to recommend this procurement method results from, *inter alia*, its review of the New Jersey BGS auction process and results and its participation in the Post 2006 procurement workshops associated with the ICC's Post 2006 initiative. Counsel for Ameren requested that my testimony:

1. Explain the advantages of an auction process in determining market value and pricing wholesale procurement and compare an auction process to an RFP process;

- 185 2. Describe the key elements of the New Jersey BGS auction process and
186 how that process is implemented;
- 187 3. Review the competitive safeguards in the New Jersey BGS Auctions
188 and those included in Ameren's auction proposal;
- 189 4. Provide my understanding of the details of the Ameren proposal;
- 190 5. Elaborate on the details of how, using the clock auction format
191 included in the Ameren proposal, the bids are processed and the final auction
192 prices are determined;
- 193 6. Offer my opinion on whether the Ameren Illinois BGS auction
194 proposal meets its objectives and includes the elements necessary for a successful
195 procurement process and evaluate whether, if Ameren and Commonwealth Edison
196 seek to implement different contract term structures, this would be likely to have a
197 negative impact on the auctions.

198 My testimony is structured to address each of these topics in turn.

199 **Q. Have you advised Ameren in developing the Competitive Procurement Auction**
200 **Rules included in this filing?**

201 A. Yes, I have.

202 **II. OPEN AUCTIONS CAN LEAD TO SUBSTANTIAL ECONOMIC BENEFITS**

203 **Q. In describing how you had come to be named T.D. MacDonald Chair, you**
204 **mentioned that the Federal Communications Commission ("FCC") started to use**
205 **auctions in 1994 to assign spectrum licenses. What was the main method used by the**
206 **FCC prior to 1994?**

207 A. Prior to Congress voting to allow the FCC to use auctions to allocate spectrum licenses,
208 the FCC mainly assigned licenses through a "beauty contest." Telecommunications
209 companies that wanted to be considered for a spectrum license would file an application,
210 typically presenting their experience, their qualifications, and their business plan for the
211 development of the license. The FCC would hold hearings to compare the proposals and
212 choose the winners based on the quality of their proposals.

213 **Q. In your view, what prompted the change to using auctions to assign spectrum**
214 **(rather than using administrative hearings)?**

215 A. In my view, the main reason was to encourage an efficient allocation of resources and an
216 efficient use of the spectrum.

217 A decision made on the basis of comparative hearing is based on each company's
218 own description of its business plan. Allocating spectrum based solely on the companies'
219 description of their business plan means that spectrum allocation likely would be based
220 more on appearances than on substance. The decision process might not lead to an
221 efficient allocation of spectrum.

222 In contrast, in an auction, the highest bidder wins. The company willing to make
223 the highest bid is generally the company that expects the highest profit. In a well-
224 designed auction where all bidders participate on an equal footing, the company that can
225 use the spectrum resource most efficiently to provide services to customers is the
226 company that expects the highest profit. Companies that are less efficient have less
227 headroom to bid up the price of the license and still make a return on their investment;
228 companies that are more efficient have more headroom and can bid higher. The auction
229 selects the most efficient provider of services for customers.

230 **Q. Can you please describe the auction format used by the FCC?**

231 A. The auction format selected by the FCC was the Simultaneous Multiple Round Auction
232 (also called the Simultaneous Ascending Auction). This auction format is a
233 "simultaneous" auction because several related items are auctioned and sold at the same
234 time, *i.e.*, simultaneously. For example, the auction format could be used to auction
235 multiple spectrum licenses for providing a given service (*e.g.*, two-way paging) but in

236 various geographical locations. The auction format has multiple rounds. In a round,
 237 bidders submit their bids on the licenses that they wish to acquire. The results are
 238 tabulated including, for a given license, the highest bid and the identity of the bidder who
 239 made the highest bid. Bidders are provided with information regarding the results of the
 240 round, which in some auctions includes the identity of the highest bidder. Bidders then
 241 are invited to better their bids in the next round. The auction ends when bidders are no
 242 longer willing to better their bids, so that a single highest bidder is left for each license.

243 **Q. Did the FCC seek advice from auction theorists in selecting this format?**

244 A. Yes, the FCC and other interested parties sought the advice of game theorists specializing
 245 in auctions. The FCC sought advice from Professor John McMillan. The main
 246 telecommunications companies, and other governmental agencies, also sought advice
 247 from game theorists specializing in auctions including Professor Preston McAfee,
 248 Professor Paul Milgrom (currently at Stanford University) and Professor Robert Wilson
 249 (currently also at Stanford).

250 **Q. Why did auction theorists recommend the Simultaneous Multiple Round Auction**
 251 **for the sale of spectrum licenses?**

252 A. The recommendation for a multiple round structure was based on auction theory. In a
 253 multiple round structure – also called an "open auction" – bidders learn by getting market
 254 information during the auction and bidders can adjust their bids on that basis. The
 255 additional information that bidders get during the auction reduces the uncertainty that
 256 bidders face regarding the value of the licenses and regarding the competition that they
 257 are facing. This reduction in uncertainty – compared to an auction with a single round or

258 with a simple two-stage structure -- leads to more aggressive bidding. The prices in the
259 auction then better reflect the bidders' assessment of market value.

260 The recommendation to use a simultaneous auction -- an auction in which all
261 available licenses to provide a given service are sold at once -- was also supported by
262 economic theory. In such a structure, bidders can pursue a specific business plan that
263 would require the aggregation of particular licenses. For instance, if a bidder has plans
264 that require licenses in contiguous geographical locations, the bidder in a simultaneous
265 auction can bid for all those licenses at once, and if in the course of the auction one or
266 more of these licenses becomes too costly from that bidder's perspective, the bidder can
267 go to a backup plan and modify the licenses that the bidder wants to pursue. Similarly, if
268 a bidder wants to establish itself in a given geographical location and several basically
269 identical licenses are available for that same geographical location, and these licenses are
270 all on offer simultaneously, the bidder can select the license that is most affordable in any
271 given round. The multiple round structure and the simultaneous sale of licenses together
272 allow bidders to arbitrage away any unwarranted price differences among similar
273 licenses, ensuring that all similar licenses are valued in accordance with the market.

274 **Q. Does the Simultaneous Multiple Round Auction have other advantages in your**
275 **opinion?**

276 A. Yes, it does. Completely unlike the administrative process that used to determine
277 spectrum allocation, the Simultaneous Multiple Round Auction has very well defined
278 rules. The highest bid wins. (It is the highest bid given that this is an auction in which
279 bidders are buying -- if it were an auction in which bidders are supplying, like the auction
280 proposed to procure supply for Ameren's customers, the lowest bid would win.) Bidders

know exactly what they have to do to win, and given the bids submitted by bidders over the course of the rounds, only one factor is used to determine the winners. This feature of the Simultaneous Multiple Round Auction is often referred to as "transparency." Although there are many different definitions of transparency in many contexts, in an auction context, a process is transparent if bidders understand and can observe the process by which winners are chosen, and if bidders understand and can observe the process by which the final sale price is determined.

When the auction format is transparent, it is likely that bidders will perceive the auction format to be fair. No one bidder is advantaged in the auction process by virtue of who the bidder is. To the extent that well established players in the market, or larger players, or affiliates of the utilities are not favored, this feature encourages smaller or newer players to participate.

Q. You mentioned that Canada was considering using the same Simultaneous Multiple Round Auction format for its assignment of spectrum licenses. Did Canada and other countries adopt this auction format for the assignment of spectrum licenses?

A. Yes. For those licenses that Canada has assigned by auction, Canada has used a Simultaneous Multiple Round Auction format. However, in Canada spectrum licenses are not necessarily assigned through auctions; some are, while others are assigned through administrative decision, and still others are awarded on a first-come first-served basis. It depends on the services to be provided.

Other countries have adopted this auction format as well. Other than the U.S. and Canada, I am aware of 21 other countries where Simultaneous Multiple Round Auctions have been used for the sale of spectrum. (See Resp. Ex. 6.1 attached to this testimony).

Q. Would you say that Simultaneous Multiple Round Auctions are now the norm for the sale of spectrum?

A. Yes, I would. With the U.S. having held 53 auctions since 1994 using this format (*see* Resp. Ex. 6.2 attached to this testimony), and with over 20 countries also having used this format, the Simultaneous Multiple Round Auction format has now very much become accepted.

Q. Was the auction format used in each of these instances exactly as it had been first designed for the FCC?

A. No. As one would expect, practitioners and auction theorists have responded to results of previous auctions to refine and improve the auction format, as well to tailor the auction formats to deal with specific circumstances and objectives.

There have been several innovations. One series of innovations concentrated on simplifying the bidding for bidders and on reducing any ability that bidders would have to signal their intentions to each other through the amounts of their price bids. The initial innovation was to introduce "non-discretionary bid increments." In this variant of the Simultaneous Multiple Round Auction, instead of having bidders decide the price amount of their bid prices on each license, the Auction Manager suggests a fixed number of prices (typically, 9 different prices) for each license in a round. The bidder chooses from this menu the price at which it is ready to acquire the license, if any. The FCC uses this variant almost exclusively now.

A second innovation was to limit the number of suggested prices to one. Bidders then just decide whether or not they are willing to accept the price suggested by the

326 Auction Manager. This variant is called "click-box" bidding. It has been used in two
 327 Canadian auctions for spectrum licenses (the 24-38 Ghz auction and the 2 Ghz auction).

328 Another innovation that goes in this same direction is a clock auction for the
 329 auction of items that are all similar. In a clock auction, the Auction Manager suggests a
 330 price, and bidders state the quantity that they want at that price. The bidding is then
 331 substantially the same as it is with click-box bidding in a Simultaneous Multiple Round
 332 Auction. In click-box bidding the bidder states whether it accepts a price for each unit; in
 333 a clock auction the bidder states how many units it wants at that price. The result is the
 334 same.

335 **Q. Do these variants of the Simultaneous Multiple Round Auction – the click-box**
 336 **bidding variant and the clock auction – share the advantages of the Simultaneous**
 337 **Multiple Round Auction that you were discussing earlier?**

338 A. Yes they do. All these auction formats are open auctions. They feature multiple rounds so
 339 that bidders learn and can re-adjust their bids as the auction proceeds. All these auction
 340 formats are simultaneous so that bidders can switch and arbitrage price differences. All
 341 these auction formats are transparent – in the sense that the rules to determine the final
 342 price and winners are clear – so that fairness and participation are promoted.

343 **Q. Have open auctions – either as Simultaneous Multiple Round Auctions or as Clock**
 344 **Auctions – been used in the energy sector?**

345 A. Yes, they have. Since 2000, over twenty open auctions have been conducted in the
 346 energy sector around the world.

347 **Q. Can you provide examples of when and where open auctions have been used in the**
348 **energy sector?**

349 A. In the United States, the Electric Distribution Companies in New Jersey have held open
350 auctions to procure full-requirements supply for their basic generation customers. These
351 auctions were held annually in 2002, 2003, 2004, and 2005. The FirstEnergy Companies
352 have held one open auction to test their rate stabilization plan. I discuss the New Jersey
353 and First Energy auctions in other portions of my testimony. More than twelve open
354 auctions have been run in Texas since 2001 to sell capacity entitlements from the plants
355 of Power Generation Companies ("PGCs") affiliated with the utilities.

356 Around the world, Électricité de France ("EdF") uses open auctions to sell power
357 purchase arrangements and virtual power plants. EdF started using this auction method
358 in the Fall of 2001. It holds four auctions every year and has held approximately fourteen
359 auctions to date. The Department of Resource Development in Alberta (Canada) has held
360 an open auction to sell Power Purchase Arrangements in the summer of 2000.

361 **Q. In the context of BGS procurement for the Illinois utilities, do you believe that the**
362 **open auction as proposed by Ameren has significant advantages over using a sealed**
363 **bid RFP process?**

364 A. Most definitely. As I stated earlier, open auctions are likely to provide important
365 economic benefits in contexts such as BGS procurement for the Illinois utilities and open
366 auctions are likely to have significant advantages over the use of a sealed bid ("RFP")
367 process.

368 In general in an open auction, bidders are provided with market information round
369 by round, and bidders can revise their bids and re-adjust their bidding strategy on that

370 basis. This is in contrast to an RFP, where bidders must make all decisions regarding
371 their bids and their strategies before submitting their proposal, and where bids are
372 generally evaluated without bidders having the flexibility to revise their offers in light of
373 new market information.

374 In the open auction that Ameren is proposing, bidders are provided with market
375 information round by round. Bidders are provided with the relationship between the level
376 of prices and the level of excess supply in the auction. This information is valuable to
377 bidders, as it can be the basis for revising bids and re-aligning bidding strategy as needed.
378 For example, a bidder that had formed expectations before the auction about the final
379 price for a product may well find that this price has been reached while there is still
380 excess supply – perhaps substantial excess supply – left in the auction. The bidder will
381 realize that the rest of the market has assessed future market conditions differently or has
382 been able to assemble the power products required for full-requirements service more
383 cheaply. Receiving market information round-by-round is valuable because all bidders
384 are independently assessing similar market risks and opportunities. In this case, the
385 bidder has the ability to re-align its expectations in light of the judgment of the rest of the
386 market or to revise its business plan so as to attempt to cut costs to be able to compete.

387 The ability of the open auctions to deliver valuable information to bidder, and the
388 flexibility that bidders have to re-adjust their bids in the light of new information lead to
389 important economic benefits. Bidders face less uncertainty than in an RFP process in
390 which they would have to bid without the benefit of this valuable information. The
391 flexibility to re-adjust bids takes away some of the guess work in bidding that is present
392 in an RFP. When bidders face less uncertainty and guesswork, bidders have more

393 confidence and tend to bid more aggressively. Bidders tend to be more willing to supply
394 at lower prices. This aggressive bidding results in prices that are more competitive and
395 better for consumers. This is an important economic benefit of open auctions in this
396 context.

397 A second important benefit of open auctions in this context is that the auction
398 tends to select the most efficient providers. Because the auction ends when bidders are no
399 longer willing to better their offers, the bidders who do win at the end of the auction are
400 those that are willing to serve the load at the lowest prices. Suppliers who are less able or
401 willing to take on the risks of serving the load at a given price will withdraw from the
402 auction at higher prices. The bidders that remain are most likely the ones that can serve
403 the load at the lowest cost and hence have decided to continue bidding as the prices
404 ticked down. Those who are willing to take on the responsibility of serving the load at
405 the final prices do so with the full knowledge of the market information that has been
406 revealed during the auction with respect to market willingness to serve at the prices
407 prevailing during each round of the auction.

408 Open auctions also have important additional economic benefits when several
409 related products are at auction. This is the case for Ameren. Ameren will be seeking to
410 procure supply for several groups of its default customers in the context of the BGS
411 procurement process: (a) Residential and Small Business ("R&SB") customers (under 1
412 MW); (b) Large Commercial and Industrial ("LC&I") customers (1 MW or above)
413 affirmatively electing a fixed price service; and (c) customers on a real-time pricing
414 service, consisting of LC&I customers that have not elected a fixed price service. In the
415 first year, Ameren will be seeking to procure supply for its R&SB customers in a mix of

one-year, two-year, and three-year supply periods so as to step into a three-year rolling procurement structure. Supplies for the other customer groups would be on a one-year basis. The load for a given customer group and for a given supply period is a separate product in the auction, meaning that a supplier could bid to serve – for example – a portion of Ameren's R&SB customers load for a three-year period, without also being required to bid to serve a portion of the load of any other of Ameren's customers, or a portion of the load of Ameren's R&SB customers for another term.

The products in the Ameren auction are clearly related. Some of the wholesale power products that bidders will assemble to provide the full-requirements service are the same across all items. Some bidders will view one item at the auction as a substitute for another, meaning that they are willing to bid on one item or the other, depending on the difference in the prices. For example, a bidder may prefer to bid on the load of R&SB customers, but if the difference in the price between the load of R&SB customers on the one hand, and the load of LC&I customers on the other is sufficiently large, the bidder would want to switch and bid on the load of LC&I customers instead. Other bidders, given their business plans, may view one item as complementary to one or several others. For example, a supplier may prefer to bid to win on both the hourly product and the product to serve LC&I customers at a fixed price so as to serve these customers regardless of the class of service they elect.

When several related products are included in the same auction, one economic benefit of the use of open auctions is that the prices that are set will be reflective of the market. In an open auction, bidders see the prices as they tick down every round. Bidders can, in response to those prices, switch their bids from one product to another. The

switching means that the auction sets price differentials that are rational and market-driven. If a gap in prices opens up, and this gap is not supported by the market's assessment of a difference in the cost of serving the products or a difference in risk, the auction format naturally works to close the price gap to a market-sustainable level.

This is how the gap would close. If a gap opens up and a product is "over-priced" relative to others in a round, bidders would typically respond by switching their bids toward that higher-priced product and out of other products. The supply of the higher-priced product will rise and the supply of the other products will fall. As a consequence, when prices are calculated for the next round, the price of the higher-priced product will tick down while the price of the lower-priced products will hold steady or will tick down by a relatively smaller amount. As a result, a price gap that is not consistent with the market will narrow. Such a price gap will close over the course of the auction to a level that can be sustained by the market and that results from a rational assessment of differences in cost. The resulting prices will be reflective of the market.

A final economic benefit of the open auction when there are several related products is that the allocation of supply responsibility over the various products proposed by Ameren to serve the load of BGS customers is likely to be efficient. Because the auction allows bidders to switch from one product to another in response to the prices they see, the auction promotes the best match of product to supplier. A bidder will bid on a product because it presents the best market opportunity given the bidder's business plan and ability to manage risk.

460 **Q. Do you believe that the Ameren proposal for an open auction is superior to the use**
 461 **of a RFP process for acquiring supply for BGS load?**

462 A. Yes. An RFP process would not have the advantages of an open auction that I have just
 463 explained. A sealed bid process presents bidders with more uncertainty, as it does not
 464 provide information to bidders on the basis of which they can revise their bids. A sealed
 465 bid process forces bidders to guess in preparing their bids as it does not typically provide
 466 bidders flexibility to adjust their bidding strategy and revise their business plan. A sealed
 467 bid process is not well suited to obtaining prices that are reflective of market when
 468 multiple products are involved. A sealed bid process does not promote the best match of
 469 product to supplier or the selection of efficient providers.

470 **Q. You have talked about the advantages of open auctions in the context of acquiring**
 471 **BGS supply. Are these advantages always present, so that open auctions are in all**
 472 **contexts preferable to RFP processes?**

473 A. No, I do not believe that open auctions are always better. No single auction design is best
 474 in all circumstances. The auction design chosen should be tailored to the circumstances
 475 and to the objectives of the situation.

476 I have explained some of the circumstances where using an open auction – such
 477 as the one proposed by Ameren – would yield important economic benefits. Similarly,
 478 there are other circumstances to which RFPs are better suited. Such circumstances
 479 include instances where the characteristics of the product at auction are difficult to define
 480 in advance. For example, in the sale of a generating plant, there can be substantial asset-
 481 specific uncertainties about physical condition, asset life, personnel costs, or expansion
 482 possibilities. As another example, in the procurement of new capacity, there can be

483 various business plans and various types of plants that must be compared on various
 484 dimensions other than price. An RFP allows bidders to submit proposals that address
 485 these uncertainties or these additional dimensions. These are circumstances in which an
 486 open auction would not offer the same economic benefits and in which another type of
 487 competitive process such as an RFP may be more likely to deliver the best outcome.

488 **Q. Are RFPs still commonly used in the energy sector?**

489 A. Yes, I believe that RFPs do remain a commonly used auction format in the energy sector.
 490 RFPs typically are used for the sale of generating assets and for the procurement of new
 491 capacity. RFPs also sometimes are used for the procurement of supply for default
 492 customers (as in Maryland and the District of Columbia as well as in several New
 493 England states).

494 **Q. Are there circumstances in which you personally have recommended or testified to**
 495 **the advantages of an RFP process over an open auction process?**

496 A. Yes, I have. I have testified on behalf of Texas New-Mexico Power Company that the
 497 choice of an RFP process for the sale of a generating asset was appropriate and that the
 498 use of an open auction would not have been beneficial. I have advised Jersey Central
 499 Power & Light in New Jersey to use an RFP process to procure supply for their BGS-
 500 Green pilot program. I have advised the Commission for Energy Regulation in Ireland
 501 and the Government of Ontario (Canada) on the use of an RFP in their solicitation for
 502 new capacity.

503 **III. KEY ELEMENTS OF THE NEW JERSEY BGS AUCTION PROCESS**

504 **III.A. Legislative and Regulatory Background Leading to New Jersey Auction Process**